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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,737

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Vasanth R. Gaddam

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08/06/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

KIM, KEVIN

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,737	Applicant(s) GADDAM ET AL.	
	Examiner Kevin Y. Kim	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16, 18-21, 23, 24 is/are rejected.
- 7) ☒ Claim(s) 17 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the appeal brief filed on May 19, 2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Chieh Fan :SPE @ AU2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15,21,23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Betts (US 7,054,377).

Claims 15 and 23.

Betts discloses a receiver (see Fig.4) comprising:

a trellis decoder (106) that is configured to decode a first data stream (COMM 1) and a second data stream (COMM2), wherein the trellis decoder decodes

the first data stream based on a first symbol map and corresponding first metric table, and the second data stream based on a second symbol map and corresponding second metric table,

wherein the second data map is configured to provide a higher gain to bits of the second data stream than the first data map provides to bits of the first data stream (see col.4:14-31). The patent specifically teaches that the first mapping defines each symbol with 8 bits while the second mapping defines each symbol with 6 bits, thus one providing a higher gain than the other.

Claims 21 and 24.

All trellis encoding is designed to minimize the effects of a symbol error as it is essentially a forward error correction encoding.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claim 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts, as applied to claim 15 above, in view of Senda et al (US 6,738,949).

Claims 16 and 19.

Betts additionally discloses a derandomizer (113) coupled to the decoder but fails to teach a de-interleaver, operably coupled to the trellis decoder, that reorders bytes from the trellis decoder, a Reed-Solomon decoder, operably coupled to the de-interleaver, that corrects errors among bytes from the de-interleaver. Senda et al, in the same field of endeavor, teaches a deinterleaver and RS decoder coupled between a trellis decoder and a randomizer for error correction. See Fig.2.

Thus, it would have been obvious to one skilled in the art at the time the invention was to further provide deinterleaver and RS decoder to the receiver, i.e. a post processor, of Betts for the purpose of providing error correction function as taught by Senda et al.

Claim 18.

Senda et al teaches that TCM is used for 8VSB in connection with ATSC standards. Thus, it would have been obvious to use the receiver of Betts, which is essentially a TCM, to decode data in conformance with ATSC standards for the Vestigial Side Band subsystem of the Digital Transmission Standard for the transmission of digital television signals, as taught by Senda et al.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Betts and Senda et al as applied to claim 19 above, and further in view of Klayman et al (US 5,699,365 previously cited).

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Betts in view of Senda et al disclose all the subject matter claimed as explained above except for the error-correcting post processor being “enabled in dependence upon a control parameter in an MPEG header.” First, high-definition television signals are compressed ones in accordance with MPEG. Klayman et al teaches selectively enabling error correction using a set of operation parameters depending on the channel condition. See col. 12, lines 16-23. Thus, it would have been obvious to one skilled in the art at the time the invention was made to use a control parameter in an MPEG header in the data stream of Betts as modified by Senda et al selectively enable error correction to reduce overhead as taught by Klayman et al.

Allowable Subject Matter

6. Claims 17 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Y Kim/

Primary Examiner, Art Unit 2611